

IAP12 Rec'd PCT/PTO 16 APR 2007

Applicants: Keiichi TAKAGAKI et al

Title: METHOD FOR SEPARATION OF GLYCOSAMINOGLYCAN FROM CORE  
PROTEIN OF PROTEOGLYCAN WITH THE USE OF XYLANASE

PCT International Application No.: PCT/JP2003/015091

PCT International Filing Date: November 26, 2003

U.S. Application No.

(if known, see 37 CFR 1.5): 10/580 279

Confirmation No.: 5985

Atty. Docket No.: 4364.P0018US

Mail Stop PCT

Commissioner for Patents

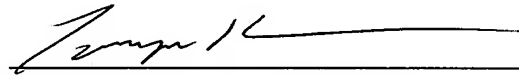
P.O. Box 1450

Alexandria, VA 22313-1450

**FIRST CLASS MAILING CERTIFICATE**

Sir:

I hereby certify that this correspondence is being deposited with the United States Postal Service under 37 CFR 1.8 as first class mail in an envelope addressed to:  
Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on April 12, 2007.

  
Terryence F. Chapman

TFC/smd

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Correspondence: Form PTO-1390 Transmittal for  
Response to Notification of  
Missing Requirements including  
enclosures listed thereon

390.05/05

U.S. PATENT AND TRADEMARK OFFICE; U.S. DEPARTMENT OF COMMERCE

EXPRESS MAIL LABEL NO.: None

April 12, 2007

TRANSMITTAL LETTER TO THE UNITED STATES DESIGNATED/ELECTED OFFICE (DO/EO/US)  
CONCERNING A SUBMISSION UNDER 35 U.S.C. 371

ATTORNEY'S DOCKET NUMBER: 4364.P0018US

U.S. APPLICATION NO. (If known, see 37 CFR 1.5): 10/580 279

CONFIRMATION NO.: 5985

INTERNATIONAL APPLICATION NO.: PCT/JP2003/015091

INTERNATIONAL FILING DATE: November 26, 2003

PRIORITY DATE CLAIMED: November 26, 2003

TITLE OF INVENTION: METHOD FOR SEPARATION OF GLYCOSAMINOGLYCAN FROM CORE  
PROTEIN OF PROTEOGLYCAN WITH THE USE OF XYLANASE

APPLICANTS FOR DO/EO/US: (1) Keichi TAKAGAKI, (2) Satoshi KANEKO and (3) Atsushi KUNO

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Applicant herewith submits to the United States Designated/Elected Office (DO/EO/US) the following items and other information:

1. ☐ This is a **FIRST** submission of items concerning a submission under 35 U.S.C. 371.
2. ☒ This is a **SECOND** or **SUBSEQUENT** submission of items concerning a submission under 35 U.S.C. 371.
3. ☐ This is an express request to begin national examination procedures (35 U.S.C. 371(f)). The submission must include items (5), (6), (9) and (21) indicated below.
4. ☐ The US has been elected (Article 31).
5. ☐ A copy of the International Application as filed (35 U.S.C. 371(c)(2))
  - a. ☐ is attached hereto (required only if not communicated by the International Bureau).
  - b. ☐ has been communicated by the International Bureau.
  - c. ☐ is not required, as the application was filed in the United States Receiving Office (RO/US).
6. ☐ An English language translation of the International Application as filed (35 U.S.C. 371(c)(2))
  - a. ☐ is attached hereto.
  - b. ☐ has been previously submitted under 35 U.S.C. 154(d)(4).
7. ☐ Amendments to the claims of the International Application under PCT Article 19 (35 U.S.C. 371(c)(3))
  - a. ☐ are attached hereto (required only if not communicated by the International Bureau).
  - b. ☐ have been communicated by the International Bureau.
  - c. ☐ have not been made; however, the time limit for making such amendments has NOT expired.
  - d. ☐ have not been made and will not be made.
8. ☐ An English language translation of the amendments to the claims under PCT Article 19 (35 U.S.C. 371(c)(3)).
9. ☒ An oath or declaration of the inventor(s) (35 U.S.C. 371 (c)(4)).
10. ☐ An English language translation of the annexes of the International Preliminary Examination Report under PCT Article 36 (35 U.S.C. 371 (c)(5)).

**Items 11 to 20 below concern document(s) or information included:**

11. ☐ An Information Disclosure Statement under 37 CFR 1.97 and 1.98.  
12. ☐ An assignment document for recording. A separate cover sheet in compliance with 37 CFR 3.28 and 3.31 is included.  
13. ☐ A preliminary amendment.  
14. ☐ An Application Data Sheet under 37 CFR 1.76.  
15. ☐ A substitute specification.  
16. ☐ A power of attorney and/or change of address letter.  
17. ☐ A computer-readable form of the sequence listing in accordance with PCT Rule 13<sup>ter</sup>.2 and 37 CFR 1.821-1.825.  
18. ☐ A second copy of the published international application under 35 U.S.C. 154(d)(4).  
19. ☐ A second copy of the English language translation of the international application under 35 U.S.C. 154(d)(4).  
20. ☒ Other items or information:  
    Copy of Notification of Missing Requirements  
    Postal Card

The following fees have been submitted:	Calculations	PTO USE ONLY
21. <input type="checkbox"/> Basic National Fee (37 CFR 1.492(a)) .....\$300.00	\$	
22. <input type="checkbox"/> Examination Fee (37 CFR 1.492(c)) If the written opinion prepared by ISA/US or the international preliminary examination report prepared by IPEA/US indicates all claims satisfy provisions of PCT Article 33(1)-(4) .....\$0.00 All other situations .....\$200.00	\$	
23. <input type="checkbox"/> Search Fee (37 CFR 1.492(b)) If the written opinion of the ISA/US or the international preliminary examination report prepared by IPEA/US indicates all claims satisfy provisions of PCT Article 33(1)-(4) .....\$0.00 Search fee (37 CFR 1.445(a)(2)) has been paid on the international application to the USPTO as an International Searching Authority .....\$100.00 International Search Report prepared by an ISA other than the US and provided to the Office or previously communicated to the US by the IB .....\$400.00 All other situations .....\$500.00	\$	
<b>TOTAL OF 21, 22 AND 23 =</b>	\$	

U.S. APPLICATION NO. (if known, see 37 CFR 1.5): 10/580 279  
INTERNATIONAL APPLICATION NO.: PCT/JP2003/015091  
ATTORNEY'S DOCKET NUMBER: 4364.P0018US

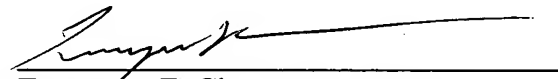
[ ] Additional fee for specification and drawings filed in paper over 100 sheets (excluding sequence listing in compliance with 37 CFR 1.821(c) or (e) or computer program listing in an electronic medium) (37 CFR 1.492(j)). The fee is \$250 for each additional 50 sheets of paper or fraction thereof.					
Total sheets	Extra sheets	Number of each additional 50 or fraction thereof (round up to a whole number)	RATE		
- 100 =	/50 =		x \$250	\$	
Surcharge of <b>\$130.00</b> for furnishing any of the search fee, examination fee, or the oath or declaration after the date of commencement of the national stage (37 CFR 1.492(h)).				\$130.00	
CLAIMS	NUMBER FILED	NUMBER EXTRA	RATE		
Total claims	2 - 20 =	0	x \$ 50.00	\$	
Ind. claims	1 - 3 =	0	x \$200.00	\$	
MULTIPLE DEPENDENT CLAIM(S) (if applicable) + \$360.00				\$	
<b>TOTAL OF ABOVE CALCULATIONS =</b>				\$	
[ ] Applicant claims small entity status. See 37 CFR 1.27. Fees above are reduced by 1/2. <b>SUBTOTAL =</b>				\$	
Processing fee of <b>\$130.00</b> for furnishing the English translation later than 30 months from the earliest claimed priority date (37 CFR 1.492(i)).				+	\$
<b>TOTAL NATIONAL FEE =</b>				\$	
Fee for recording the enclosed assignment (37 CFR 1.21(h)). The assignment must be accompanied by an appropriate cover sheet (37 CFR 3.28, 3.31). <b>\$40.00</b> per property				+	\$
<b>TOTAL FEES ENCLOSED =</b>				\$130.00	
				Amount to be refunded:	\$
				Amount to be charged:	\$

- a. [X] A check in the amount of **\$130.00** to cover the above fees is enclosed.  
b. [ ] Please charge my Deposit Account No. \_\_\_\_\_ in the amount of \$ \_\_\_\_\_ to cover the above fees. A duplicate copy of this sheet is enclosed.  
c. [X] The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment to Deposit Account No. 06-1382. A duplicate copy of this sheet is enclosed.  
NOTE: Where an appropriate time limit under 37 CFR 1.495 has not been met, a petition to revive (37 CFR 1.137(a) or (b)) must be filed and granted to restore the International Application to pending status.

IN DUPLICATE

PLEASE DIRECT CORRESPONDENCE TO  
THE ADDRESS ASSOCIATED WITH THE  
FOLLOWING CUSTOMER NUMBER: 23474

300.07/05

  
Perryence E. Chapman 10580279  
Registration Number: 32 549  
TFC/smd

FLYNN, THIEL, BOUTELL & TANIS, P.C.  
2026 Rambling Road  
Kalamazoo, Michigan 49008-1631



## UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
 United States Patent and Trademark Office  
 Address: COMMISSIONER FOR PATENTS  
 P.O. Box 1450  
 Alexandria, Virginia 22313-1450  
 www.uspto.gov

U.S. APPLICATION NUMBER NO.	FIRST NAMED APPLICANT	ATTY. DOCKET NO.
10/580,279	Keiichi Takagaki	4364.P0018US

INTERNATIONAL APPLICATION NO.

PCT/JP03/15091

I.A. FILING DATE

PRIORITY DATE

11/26/2003

23474

FLYNN THIEL BOUTELL & TANIS, P.C.  
 2026 RAMBLING ROAD  
 KALAMAZOO, MI 49008-1631

DHT \_\_\_\_\_ DGB \_\_\_\_\_ TFC \_\_\_\_\_  
 P.C.M. \_\_\_\_\_ LLC \_\_\_\_\_ BRT \_\_\_\_\_  
 SRT \_\_\_\_\_ D.H. \_\_\_\_\_ SBW \_\_\_\_\_

FEB 15 2007

CONFIRMATION NO. 5985

371 FORMALITIES LETTER

HJ \_\_\_\_\_ PMG \_\_\_\_\_  
 GMS \_\_\_\_\_ CRA \_\_\_\_\_ KC \_\_\_\_\_  
 FILE \_\_\_\_\_



\*OC000000022420801\*

Date Mailed: 02/12/2007

### NOTIFICATION OF MISSING REQUIREMENTS UNDER 35 U.S.C. 371 IN THE UNITED STATES DESIGNATED/ELECTED OFFICE (DO/EO/US)

The following items have been submitted by the applicant or the IB to the United States Patent and Trademark Office as a Designated / Elected Office (37 CFR 1.495).

- Copy of the International Application filed on 05/24/2006
- English Translation of the IA filed on 05/24/2006
- Copy of the International Search Report filed on 05/24/2006
- U.S. Basic National Fees filed on 05/24/2006

FILE NO: HTNAK 18 ATTY: TFC  
 DUE DATE: 04-12-2007 ( 20070412 )  
 4364.P0018US /INIT: ( 20070212 )  
 ACTION: 10 RES PER: 2 M DK1  
 FILE FEE DEC, ET AL / 1868

The applicant needs to satisfy supplemental fees problems indicated below.

The following items **MUST** be furnished within the period set forth below in order to complete the requirements for acceptance under 35 U.S.C. 371:

- Oath or declaration of the inventors, in compliance with 37 CFR 1.497(a) and (b), identifying the application by the International application number and international filing date.
- To avoid abandonment, a surcharge (for late submission of filing fee, search fee, examination fee or oath or declaration) as set forth in 37 CFR 1.492(h) of \$130 for a non-small entity, must be submitted with the missing items identified in this letter.

#### SUMMARY OF FEES DUE:

Total additional fees required for this application is **\$130** for a Large Entity:

- \$130 Surcharge.

**ALL OF THE ITEMS SET FORTH ABOVE MUST BE SUBMITTED WITHIN TWO (2) MONTHS FROM THE DATE OF THIS NOTICE OR BY 32 MONTHS FROM THE PRIORITY DATE FOR THE APPLICATION, WHICHEVER IS LATER. FAILURE TO PROPERLY RESPOND WILL RESULT IN ABANDONMENT.**

The time period set above may be extended by filing a petition and fee for extension of time under the provisions of 37 CFR 1.136(a).

Applicant is reminded that any communications to the United States Patent and Trademark Office must be mailed to the address given in the heading and include the U.S. application no. shown above (37 CFR 1.5)

Registered users of EFS-Web may alternatively submit their reply to this notice via EFS-Web.  
<https://sportal.uspto.gov/authenticate/AuthenticateUserLocalEPF.html>

For more information about EFS-Web please call the USPTO Electronic Business Center at 1-866-217-9197 or visit our website at <http://www.uspto.gov/ebc>.

**If you are not using EFS-Web to submit your reply, you must include a copy of this notice.**

DARRELL C COTTMAN

Telephone: (703) 308-9140 EXT 203

PART 1 - ATTORNEY/APPLICANT COPY

U.S. APPLICATION NUMBER NO.	INTERNATIONAL APPLICATION NO.	ATTY. DOCKET NO.
10/580,279	PCT/JP03/15091	4364.P0018US

FORM PCT/DO/EO/905 (371 Formalities Notice)